

Remarks

Claims 2-8 have been cancelled. Applicants reserve the right to pursue the original claims and other claims in this application and in other applications. New claims 9-18 have been added. Claims 1 and 9-18 are pending in this application.

The specification has been amended on pages 1, 4, 5, 9, 12 and 19 to update the current status of any application data and correct typographical errors as requested by the Examiner.

An Abstract is attached to this response as requested by the Examiner.

An Information Disclosure Statement, citing the IBIP Specifications mentioned on pages 2-3 of the specification, along with additional references cited in the co-pending related applications cited on page of 1 of the specification, is being filed concurrently herewith.

Claim 1 stands rejected under 35 U.S.C. §102(e) as being anticipated by Kara (U.S. Patent No. 5,822,739). Claim 2 stands rejected under 35 U.S.C. §102(e) and anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Kara. Claims 3-8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kara. Claims 2-8 have been cancelled. Reconsideration with respect to claim 1 is respectfully requested.

The present invention is directed to a virtual postage metering system and method. Claim 1 is directed to a method for evidencing postage that comprises “generating a digital token . . . including encrypted information for the mailpiece . . . creating a transaction record . . . including the digital token and the postal information; signing the transaction record” and “storing the transaction record in a database.”

The Office Action contends that Kara discloses signing the transaction record and storing the transaction record in a database at Col. 14, lines 12-36. Applicants respectfully disagree. In the present invention, a key is used to sign the transaction

[Handwritten notes and signatures]

record, thus creating a digital signature. The signed transaction record is stored in the data center. The Office Action contends that a transaction record having a “unique transaction identifier” is equivalent to signing a transaction. The unique transaction identifier in Kara is merely an identifier of the transaction, such as, for example, a serial number or the like. A digital signature, in contrast, authenticates and protects the integrity of the information in the transaction record. Thus, the signed record is unalterable and the signature cannot be repudiated. These attributes are not present in a “unique transaction identifier” as contended by the Office Action.

Furthermore, in Kara, a meter program is used to generate a data packet that is a digital representation or image of the postage indicia to be ultimately printed by the demanding site. The data packet includes information required of a valid postage indicia by a postal service. (Col. 14, lines 30-41). Thus, the data packet is sent to the demanding site for use in printing the indicia. Specifically, at step 308 of Fig. 3, the data packet generated from the received demand is transmitted via the data communications link to the demand site. (Col. 15, lines 1-3). There is no disclosure, teaching or suggestion in Kara of creating a transaction record, signing the transaction record, and storing the signed transaction record at the data center as is recited in claim 1.

For at least the above reasons, Applicants respectfully submit that claim 1 is allowable over the prior art of record.

New claim 9 is directed to a system for dispensing postage that includes a data center, the data center comprising a “storage device,” a “first cryptographic module” that includes a “first key to decrypt a user authentication key included in the user account, the user authentication key being used to authenticate the user; and a second cryptographic module . . . including a second key to decrypt a token key included the meter account, the token key used to generate a digital token, the second cryptographic key further including a third key used to sign a transaction record associated with generating the digital token, the signed transaction record being stored in the storage device.”

Kara, in contrast, does not disclose, teach or suggest first and second cryptographic modules used to authenticate the user or to generate a digital token using a token key decrypted by the second cryptographic module. Instead, in Kara, a Meter program is used to generate a data packet representing the desired postage indicia. The system of Kara does not disclose, teach or suggest cryptographic modules as recited in claim 9.

In addition, claim 9 includes limitations substantially similar to those of claim 1, namely signing a transaction record and storing the signed transaction record in the data center. For at least the above reasons, Applicants respectfully submit that claim 9 is allowable over the prior art of record. Claims 10-13, dependent upon claim 9, are allowable along with claim 9 and on their own merits.

Claim 14 includes limitations substantially similar to those of claim 9. For the same reasons given with respect to claim 9 above, Applicants respectfully submit that claim 14 is allowable over the prior art of record. Claims 15-18, dependent upon claim 14, are allowable along with claim 14 and on their own merits.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims of this case are in a condition for allowance and favorable action thereon is requested.

Respectfully submitted,



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MARKED VERSION TO SHOW CHANGES**In the Specification:**

Amend page 1, first paragraph, as follows:

This is a continuation-in-part application of U.S. Provisional Patent Application Serial Number 60/049,518, filed June 13, 1997, now abandoned, and assigned to the assignee of the present invention.

Amend page 1, second paragraph, as follows:

The present invention relates generally to a postage metering system and method for evidencing postage payment in an open system and, more particularly, to a postage metering system and method for evidencing postage payment in a virtual postage metering system [10] configuration.

Amend page 1, third paragraph as follows:

The present application is related to the following U.S. [International] Patent Applications Serial Nos. [(Attorney Docket Nos. E-733, E-734, E-753, E-736 and E-738), all filed concurrently herewith] 09/242,208; 09/242,209; 09/242, 206; 09/242,205 and 09/242,207, all being assigned to the assignee of the present invention, all of which are incorporated herein by reference in their entirety.

Amend page 4, lines 4-23, as follows:

One version of a network metering system, referred to herein as a “virtual postage metering system [10]”, has many Host PCs without any PSDs coupled thereto. The Host PCs run Host Applications, but all PSD functions are performed on Server(s) located at a

Data Center. The PSD functions at the Data Center may be performed in a secure device attached to a computer at the Data Center, or may be performed in the Data Center computer itself. The Host PCs must connect with the Data Center to process transactions such as postage dispensing, meter registration, or meter refills. Transactions are requested by the Host PC and sent to the Data Center for remote processing. The transactions are processed centrally at the Data Center and the results are returned to the Host PC. Accounting for funds and transaction processing are centralized at the Data Center. See, for example, U.S. Patents Numbers 5,454,038 and 4,873,645, which are assigned to the assignee of the present invention.

The virtual postage metering system [10] does not conform to all the current requirements of the IBIP Specifications. In particular, the IBIP Specifications do not permit PSD functions to be performed at the Data Center. However, it is understood that a virtual postage metering system [10] configuration with each mailer's PSD located at the Data Center may provide an equivalent level of security as required by the IBIP Specifications.

Amend page 5, lines 6-14, as follows:

In U.S. Patents Number 4,873,645 and [5,454,3,038] 5,454,038, a virtual postage metering system and method are disclosed wherein the postal accounting and token generation occur at a data center remote from the postage evidencing printer. Although the Data Center may be a secure facility, there remain certain inherent security issues since the accounting and token generation functions do not occur in a secure device local to the postage printer. The virtual postage metering system includes a computer coupled to an unsecured printer and to a remote data metering system. The postal accounting and the token generation occur at the Data Center.

Amend page 9, lines 3-19, as follows:

Referring again to Fig. 1, the mailer initiates a postage evidencing transaction by running client software in PC 20, which contacts Data Center 30. At Data Center 30, a Communication Server 32 supports connectivity from various communication technologies and protocols. The Communication Server merges all incoming traffic and routes it to a Function Server 34, which includes application software that supports mailer sign-on, postage dispensing and postal reporting. All mailer and meter information is accessed from a Database Server 36 where the information is securely stored using secure cryptographic processes and protocols as described below. Data Center 30 maintains cryptographic keys for each meter account in Database Server 36. The cryptographic keys are used for postage evidencing and verification as well as for security of the records stored in Database Server 36. A Key Management System 38 administers all cryptographic keys used in virtual postage metering system 10. The cryptographic keys may be distributed to verifiers in remote locations. U.S. Patent [Application Serial Number 08/553812, filed October 23, 1995, and] No. 5,812,666, assigned to the assignee of the present invention, describes such a key management system.

Amend page 9, line 26, to page 10, line8, as follows:

In the present invention, the PSD does not exist, i.e., there is no metering device coupled to the PC from which postage payment is requested. Virtual postage metering system 10 replaces the accounting and metering functions of the PSD with metering software at PC 20 and mailer account information performed and updated at Data Center 30. The virtual postage metering system 10 provides each mailer with a metering system that has the capability of originating transactions from multiple origins of deposit. See, for example, previously noted [International.] U.S. Patent Application Serial Number [[Attorney Docket E-735]] 09/242,206.

Various methods can be used to determine the origin of deposit for a requested transaction. For example, a method for determining origin zip code using a caller ID

from a telephone call is disclosed in U.S. Patent [Application Serial Number 08/775,818, filed December 31, 1996, and] No. 5,943,658, assigned to the assignee of the present invention, which is hereby incorporated in its entirety by reference.

Amend page 12, lines 17-22, as follows:

At Data Center 30, the authentication keys are not available in plain text, but must be distributed to the mailer. Conventional methods of distributing and updating the authentication key for each mailer can be used. See, for example, previously noted U.S. Patent [Application Serial Number 08/553812] No. 5,812,666, which describes a key management system for distributing and updating cryptographic keys to the secure boxes and the mailer's PC.

Amend page 19, lines 6-14, as follows:

Database Server 36 includes records of mail volumes and accounting of postal funds within it database. By access Data Center 30, the postal service can perform on-line tracking of selected information available from Data Center [3] 30. Such information includes volumes of mail pieces processed or in process, allocation of funds to originating post offices and meter account use. Such on-line tracking allows the postal service to manage its resources in a more efficient manner. For example, the postal service could identify locations with peak workloads and could determine locations of mail fraud by comparing mail volumes with expected postal revenues.

In the Claims:

Cancel claims 2-8. New claims 9-18 have been added (refer to clean version at the beginning).